GRADE I STANDARDS AND LEARNING ACTIVITIES

Strand: Number Sense and Operations

NUMBER SENSE

1.NSO-N.1. Count, read, and write whole numbers to 110 and relate them to the quantities they represent.

Example: Read "seventy-two" for the number 72. Know that 60 is bigger than 20.

1.NSO-N.2. Compare and order whole numbers to 110 by using symbols for less than, equal to, or greater than (<, =, >).

Example: Arrange the numbers 73, 24, and 63 in order from greatest to least, using the correct symbol accurately to show the relationship; give each student a number card, then ask them to line up in order.

1.NSO-N.3. Identify the place value of the digits to 110.

Example: Use a place value chart with tens and ones and show the number 23 by using 2 groups of tens and 3 ones.



1.NSO-N.4. Represent equivalent forms of the same number through the use of physical models, diagrams, and number expressions.

Example: Write 9 as 4 + 5, 3 + 6, 3 + 3 + 3, 10 - 1, 12 - 3.

1.NSO-N.5. Identify numbers to 20 as odd or even.

1.NSO-N.6. Make combinations of different coins up to 50 cents.

Example: With a collection of coins, show four ways to make \$0.25.

FRACTIONS

1.NSO-F.7. Model, identify, and represent fractions such as 1/2, 1/3, and 1/4 as parts of wholes (e.g., 1/4 of a pie) and parts of groups.

Example: Count the small rectangles and color 1/4 of them:



COMPUTATION AND OPERATIONS

1.NSO-C.8. Demonstrate the ability to use conventional algorithms for addition and subtraction (two two-digit whole numbers).

1.NSO-C.9. Demonstrate an understanding of various meanings of addition and subtraction, such as addition as combination (i.e., plus, combined with, more), subtraction as comparison (i.e., how much less, how much more), equalizing (i.e., how many more are needed to make these equal), and separation (i.e., how much remaining).

Example: Put together 3 pencils and 5 pencils. Tell how many pencils you have and explain what you are doing. Take away 6 blocks from a group of 10. Tell how many blocks are left and explain what you are doing.

1.NSO-C.10. Know addition and subtraction facts (addends to 10), commit to memory, and use them to solve problems.

Example: 2 + 8 = ? 10 - 1 = ? 3 + 2 = ? 2 + 3 = ?

Strand: Number Sense and Operations (continued)

COMPUTATION AND OPERATIONS (CONTINUED)

1.NSO-C.11. Demonstrate the ability to fluently add and subtract one- and two-digit whole numbers that do not require regrouping.

Example: 23 + 25 =?

1.NSO-C.12. Use mental arithmetic to find the sum or difference of two one-digit whole numbers.

Example: Hearing that Tina has 2 dogs, Sue has 3 cats, and Mark has 7 fish, how many animals do they have in all? How many more fish are there than cats?

1.NSO-C.13. Find the sum of three one-digit whole numbers.

Example: 3 + 4 + 2 = ?

1.NSO-C.14. Identify one more than, one less than, 10 more than, and 10 less than for any number up to 100.

Example: Name the number one less than 74. Name the number one more than 74.

1.NSO-C.15. Understand and use the inverse relationship between addition and subtraction to solve problems and check solutions.

Example: List two facts that are related to 8 + 6 = 14 (e.g., 14 - 6 = 8, 14 - 8 = 6).

1.NSO-C.16. Know the meaning of "two times something" or "three times something" as an addition (e.g., two times seven means 7 + 7).

Strand: Patterns, Relations, and Algebra

1.PRA.1. Identify, reproduce, describe, extend, and create simple rhythmic, shape, size, number, color, and letter repeating patterns.

Example: Draw and color the shapes to continue the pattern consisting of a square, triangle, circle, square, triangle.

1.PRA.2. Describe and create arithmetic progressions.

Example: A number pattern begins with these numbers: 1, 4, 7, 10 ... or 25, 23, 21 Tell what the next number will be and explain how you decided on that number.

1.PRA.3. Identify arithmetic progressions on the hundreds chart.

Example: Using a hundreds chart (with many even numbers missing from the chart), count by twos by writing in the missing numbers.

1.PRA.4. Skip count forward and backward by twos, fives, and tens up to at least 50, starting at any number and using appropriate aids (e.g., hundreds chart, number line).

Example: Count 48 pencils by twos.

1.PRA.5. Write and solve number sentences from problem situations that express relationships involving addition and subtraction, including +, -, <, >, =.

Example: You have three turtles and four iquanas. You want to know how many animals you have altogether. Write a number sentence for this problem and use it to find the total number of animals (3 + 4 = 7 or 4 + 3 = 7).

Example: Sandra has five marbles and Tom has three; write a number sentence for this problem using <, =, or >.

Strand: Patterns, Relations, and Algebra (continued)
1.PRA.6. Apply knowledge of fact families to solve simple open sentences for addition and subtraction that have variables (e.g., $\square + 2 = 7$ and $10 - \square = 6$).
Strand: Geometry
1.G.1. Describe attributes and parts of two- and three-dimensional shapes (e.g., length of sides and number of corners, edges, faces, and sides).
Example: Using geoblocks, trace the faces, identify the shape of each face, and tell the number of congruent faces.
1.G.2. Identify congruent shapes.
Example: Use dot paper and draw a figure that is the same size and shape as the given figure.
1.G.3. Identify symmetry in two-dimensional shapes.
Example: Use pencil and paper to draw lines of symmetry in a square. Discuss your findings.
1.G.4. Combine shapes and take them apart to make other shapes.
Example: Arrange two congruent right triangles to form a rectangle.
1.G.5. Arrange and describe objects in space by proximity, position, and direction (e.g., near, far, below, above, up,

Example: Name objects that are near your desk and objects that are in front of it. Explain why there may be some objects in both

groups.

Strand: Measurement

1.M.1. Compare the length, weight, and volume of two or more objects by using direct comparison.

Examples: Place a box of pencils on one side of the balance and compare to the weight of other objects (e.g., scissors, paper, paintbrushes). Write H for heavier and L for lighter, when comparing pencils to other objects.

In comparisons, student should use the notation <, =, > where applicable.

- **1.M.2.** Make and use estimates of measurement, including time and weight.
- **1.M.3.** Measure the length of objects by repeating a nonstandard or standard unit.

Example: Measure the length of a table with blocks and answer the question, "How many blocks long is the table?"

1.M.4. Tell time at half-hour intervals on analog and digital clocks using a.m. and p.m., and relate time to events.

Example: Is recess before or after lunch?

1.M.5. Make combinations of coins up to 50 cents.

Example: Show \$0.35 in 2 ways; draw the coins that were used.

Strand: Data Analysis, Statistics, and Probability

1.DASP.1. Use surveys and observations to gather data about themselves and their surroundings.

Example: Survey family members about their favorite desserts, favorite TV shows, or favorite sports.

- 1.DASP.2. Represent and compare data (e.g., largest, smallest, most often, least often) using tally charts, pictures, and bar graphs.
- **1.DASP.3.** Ask and answer simple questions related to data representations.

Examples: Find out who is the tallest student in the class. Find out what the favorite fruit of the class is. What is the favorite subject of the class?